	Type	L #	Hits	Search Text	DBs
1	BRS	L1	3	prothrombin same thrombin same (polyclonal or antiserum or antisera) same (absorb$2 or absorption)	USPAT
2	BRS	L2	3	prothrombin same thrombin same (polyclonal or antiserum or antisera) same (absorb$2 or absorption)	USPAT
3	BRS	L3	1	prothrombin same thrombin same (polyclonal or antiserum or antisera) same pivka	USPAT
4	BRS	L5	13	pivka	USPAT

	Time Stamp	Comments	Error Definition	Errors
1	2003/09/23 15:04			0
2	2003/09/23 15:16			0
3	2003/09/23 15:17			0
4	2003/09/23 15:18			0

****
Welcome to DIALOG

Dialog level 03.02.02D
Logon file001 23sep03 14:47:36

? ds

Set Items Description
S1 0 (PIVKA OR DES(2A)CARBOXYPROTHROMBIN) AND (POLYCLONAL OR AN-
TISERUM OR ANTISERA) AND (ABSORP? OR ABSORB?)
S2 990 (PIVKA OR DES(2W)CARBOXYPROTHROMBIN)
S3 14 S2 AND (POLYCLONAL OR ANTISERUM OR ANTISERA)
S4 8 RD (unique items)
S5 77 S2 AND MONOCLONAL
S6 2 S5 AND S3
S7 75 S5 NOT S3
? logoff y
23sep03 14:52:55 User219516 Session D555.4
Logoff: level 03.02.02 D 14:52:55

****
Welcome to DIALOG
Logon file001 23sep03 16:20:08

? ds

Set	Items	Description
S1	874	PIVKA OR HYPOCARBOXYLATED(W)PROTHROMBIN
S2	0	S1 AND THROMBIN(3N)INTERFERENCE
S3	0	S1 AND FIBRIN(3N)INTERFERENCE
S4	0	S1 AND INTERFERENCE(5N)THROMBIN
S5	0	S1 AND THROMBIN(5N)CROSS(W)REACT?
S6	0	S1 AND FIBRIN(5N)CROSS(W)REACT?

? logoff y
23sep03 16:24:55 User219516 Session D557.3
Logoff: level 03.02.02 D 16:24:55

02676917 BIOSIS NO.: 000067064986
ANTIBODIES DIRECTED AGAINST A GAMMA CARBOXY GLUTAMIC-ACID-RICH REGION OF
BOVINE PROTHROMBIN PREPARATION ISOLATION AND CHARACTERIZATION
AUTHOR: FURIE B; PROVOST K L; BLANCHARD R A; FURIE B C
AUTHOR ADDRESS: HEMATOL. SECT., TUFTS-N. ENGL. MED. CENT., TUFTS UNIV. SCH.
MED., BOSTON, MASS. 02111, USA.
JOURNAL: J BIOL CHEM 253 (24). 1978 (RECD. 1979). 8980-8987. 1978
FULL JOURNAL NAME: Journal of Biological Chemistry
CODEN: JBCHA
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: Antibodies directed against the .gamma.-carboxyglutamic acid-rich region of prothrombin were isolated from antisera raised in rabbits immunized with native bovine prothrombin. Antibodies prepared against prothrombin were fractionated by sequential immunoabsorption using prothrombin and prothrombin fragments to yield a population of antibodies specific for the region of prothrombin from amino acid residue 12 to residue 44. The anti-(12-44)N antibodies formed soluble complexes with prothrombin and inhibited the conversion of prothrombin to thrombin in plasma. The anti-(12-44)N antibodies were Ig[immunoglobulin]G immunoglobulins that were heterogeneous with regard to charge and affinity for prothrombin. Anti-(12-44)N antibodies contained high affinity and low affinity antibody subpopulations which bound prothrombin with an average Kassoc of 2.6 .times. 107 M-1 (12-44)N was metal-dependent and bound prothrombin strongly only in the presence of CaCl2. Prothrombin and fragment 1 competed equally with 125I-labeled prothrombin for anti-(12-44)N, but a 250-fold molar excess of fragment 12-44 to prothrombin and a 100-fold molar excess of abnormal prothrombin (des-.gamma.-carboxyprothrombin) to prothrombin were required to inhibit 50% of the prothrombin from binding anti-(12-44)N. .gamma.-Carboxyglutamic acid did not compete with prothrombin for anti-(12-44)N. Anti-(12-44)N antibodies appeared to be conformationally specific for the native format of the region 12-44 in prothrombin and cross-react poorly with the region 12-44 in prothrombin and cross-react poorly with the region 12-44 in abnormal prothrombin. Some of these antibodies were directed against an antigenic determinant whose geometry was Ca(II)-dependent. The Ca(II)-dependent structural transition of prothrombin apparently involves, in part, alteration of the tertiary structure of the region 12-44.

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